



Cystic Fibrosis Research News

Title:

Pleural Effusions in Non-Transplanted Cystic Fibrosis Patients

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What was your research question?

How common are pleural effusions - collections of fluid between the chest wall and the lung – in people with cystic fibrosis (CF)? When do they occur and what causes them? How does the presence of a pleural effusion affect a person with CF?

Why is this important?

There is essentially no data published on this research question. We hope by gathering and reporting our finding we can help other clinicians facing this rare condition make good clinical decisions.

What did you do?

We gathered all the cases we could find using the databases of three large CF centers in the United States reporting pleural effusions in people with CF over a five year period. After identifying cases, we gathered information on the patient, the effusion, and what happened to the patient after the effusion was discovered.

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What did you find?

Pleural effusions are very rare in people with CF. We only found 17 cases during the period we examined. Our results indicate that there are probably about one hundred fifty pleural effusions every year in the estimated 35,000 adults with CF worldwide. Some of the effusions seemed to have no consequence to the patient and some required aggressive management such as placement of a tube in the chest to drain out the infection.

What does this mean and reasons for caution?

We confirmed the long held belief that effusions are rare in the CF population. We also demonstrate that some pleural effusions are secondary to infection. We didn't find a clear relationship between increasingly aggressive management of the effusions and worse patient outcomes. It is important to realize that our study was small therefore it is unclear whether having a pleural effusion has any effect on the patient or whether the study was underpowered and unable to detect an effect.

What's next?

Future studies will need to screen large numbers of patients over longer time periods to identify enough cases to obtain more information.

Original manuscript citation in PubMed

N/A 4 December 2016